

AMENDMENTS TO THE SPECIFICATION:

Please replace the paragraphs at page 8, line 5-page 10, line 1 with the following amended paragraphs:

A gist of the present invention involves the recognition by the present inventors of the drawbacks in the ~~conventional~~previously known art. In particular, ~~conventional~~previously known techniques (e.g., ~~conventional~~ mobile communications systems under the standards of IS-95, HDR, IMT-2000, etc.) for controlling data transmission rates between mobiles and a base station do not effectively consider the particular data transmission circumstances and channel conditions of each mobile station.

~~Conventional~~Previously known HDR systems do not employ effective power control techniques, thus there are difficulties in providing high-speed data transmissions to those mobiles located far from the base station requiring signal transmissions at a higher power compared with the signal transmissions for mobiles located in proximity to the base station requiring only low level power.

The ~~conventional~~previously known HDR system is disadvantageous in that, when the base station detects the load on the reverse link to be too large and feeds back this information via a reverse activity (RA) channel, the reverse link packet data rate is unconditionally reduced by one-half for all users (mobiles), and thus overall data throughput at each base station is undesirably reduced. The ~~conventional~~previously known art ignores the

situations that individual mobiles have different requirements and should advantageously be controlled individually in a dedicated manner.

Additionally, the ~~conventional~~previously known HDR system is inefficient because no messages are sent to the mobiles to indicate that their packet data rates should be increased when the reverse link load is small.

Furthermore, the ~~conventional~~previously known art merely considers the reverse link load. However, in practical data packet transmission applications, the channel or link conditions, such as signal interference and transmission power requirements, and other communications environment factors effect data transmissions on the reverse link.

To address at least the above-identified ~~conventional~~previously known art problems, the present invention utilizes information fed back from the forward link for data packet transmission over the reverse link upon considering the particular data transmission circumstances and channel conditions of each mobile station and accordingly controlling the mobiles in a dedicated manner. By doing so, the data transmission rate over the reverse link is improved. More specifically, to improve reverse link data transmission rates, messages informing the mobile station to adjust (increase, decrease or maintain) its data transmission rate are sent from the base station in accordance with reverse link load information.

BRIEF DESCRIPTION OF THE DRAWINGS

Figure 1 shows a portion of a conventional reverse channel structure for sending transmission data rate increase information from a base station to a mobile;

Figure 2 shows a partial structure of a ~~base station~~mobile according to an embodiment of the present invention;

Figure 3 shows a partial structure of a ~~mobile~~base station according to an embodiment of the present invention;

Figure 4 shows the details of certain relative portions of the determinator ~~[[24]]~~ 34 in a base station, a portion of which is shown in Figure ~~[[2]]~~ 3;